

Callum Franks

Academic Portfolio

00.

Profile

Hi!

I'm Callum Franks, a recent Graduate of the Bachelor of Design in Architecture from UTS. I have a drive and ardor for the exploration of socially and environmentally sustainable design rhetorics. I have a keen interest in construction methodologies and techniques as well as emerging materials and cyclical design practices. I have sought to embody these conceptual modes throughout my studio design projects, and hope to enact these modes throughout my career.

Software Proficiencies

Rhino 7	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Illustrator	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Photoshop	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
ClimateStudio	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
TwinMotion	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Vray	<div><div></div><div></div><div></div><div></div><div></div></div>
Qgis	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Dialux	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>

01.

p03.

Student Housing

This project seeks to address and counter both the growing dehumanisation of multiplex residents (particularly students) through the optimisation of space, and the removal of key socially active spaces and domestic functions. This is achieved through the creation of socially navigation at points of domestic actions.

UTS Building 15
622-632 Harris
St Ultimo

02.

p09.

Kyeemagh Public

The Kyeemagh Public scheme seeks to utilise construction modes and methodologies that align with modern building practices, but facilitate a strong connection with native land and crucial green learning spaces. Through fostering a connection between students and native green space playful environments are created, allowing for the harbouring of core memories and learning experiences for the students.

30A Jacobson Av
Kyeemagh

03.

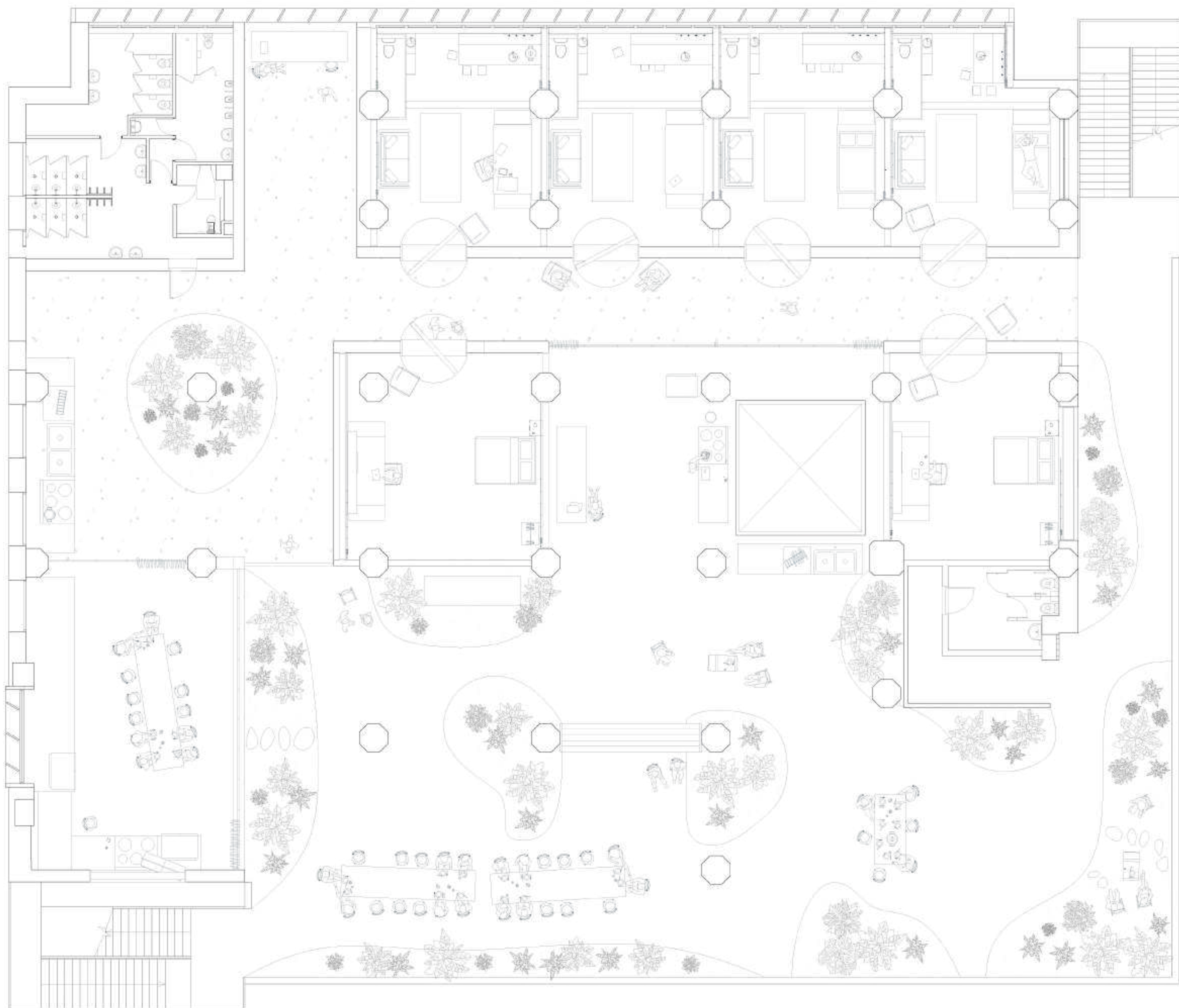
p20.

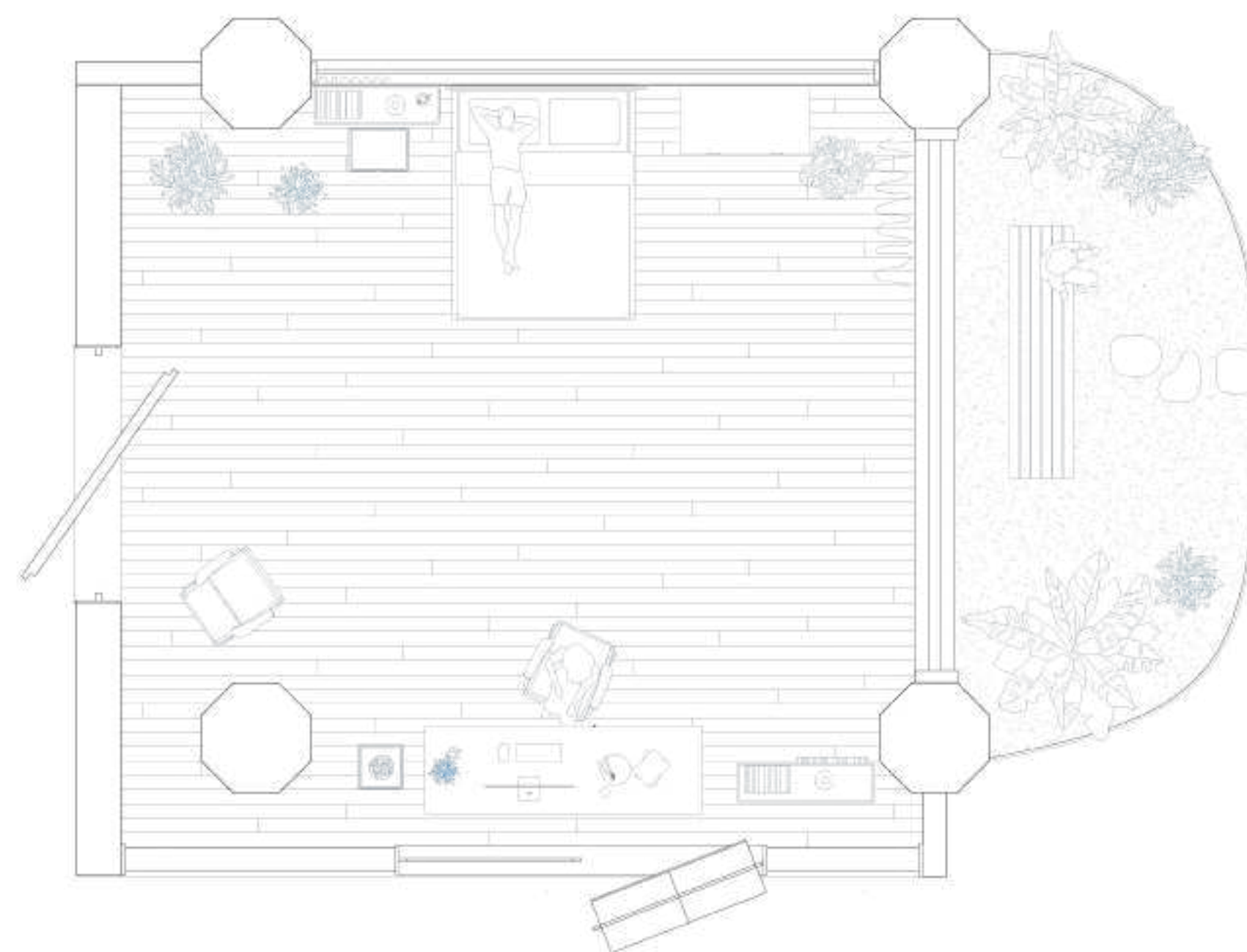
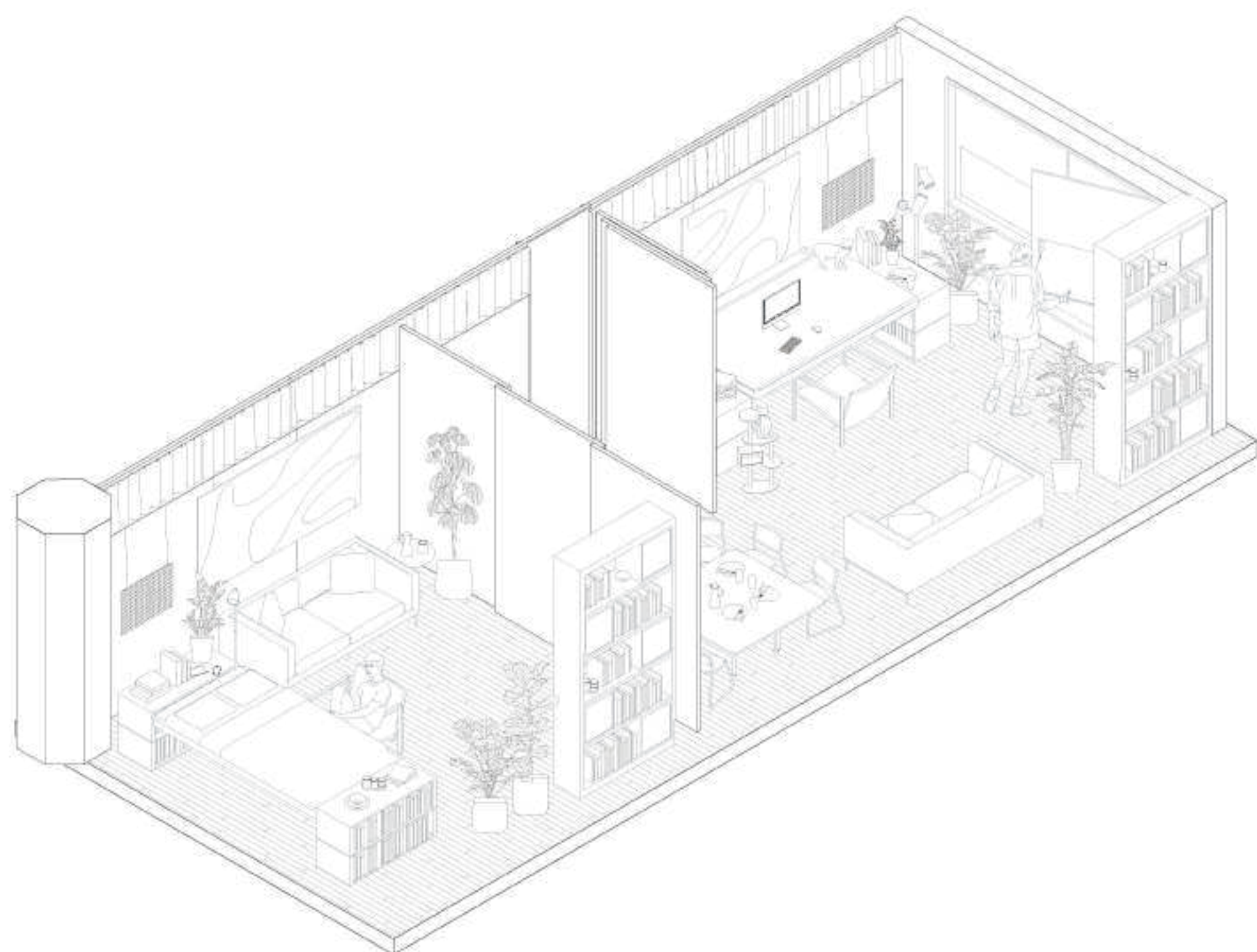
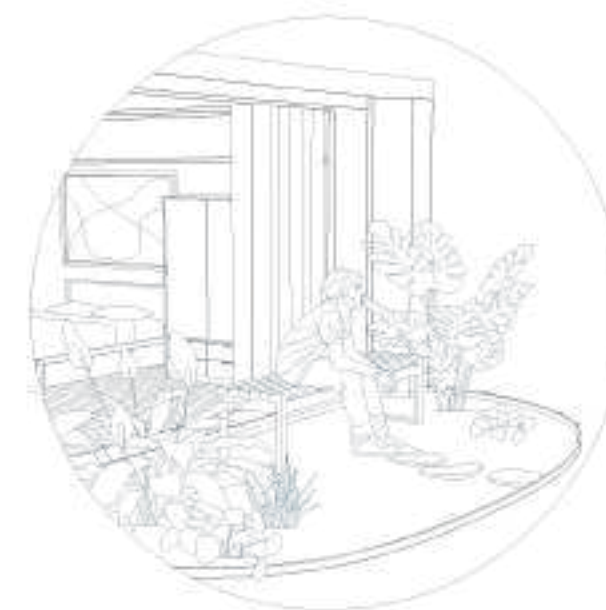
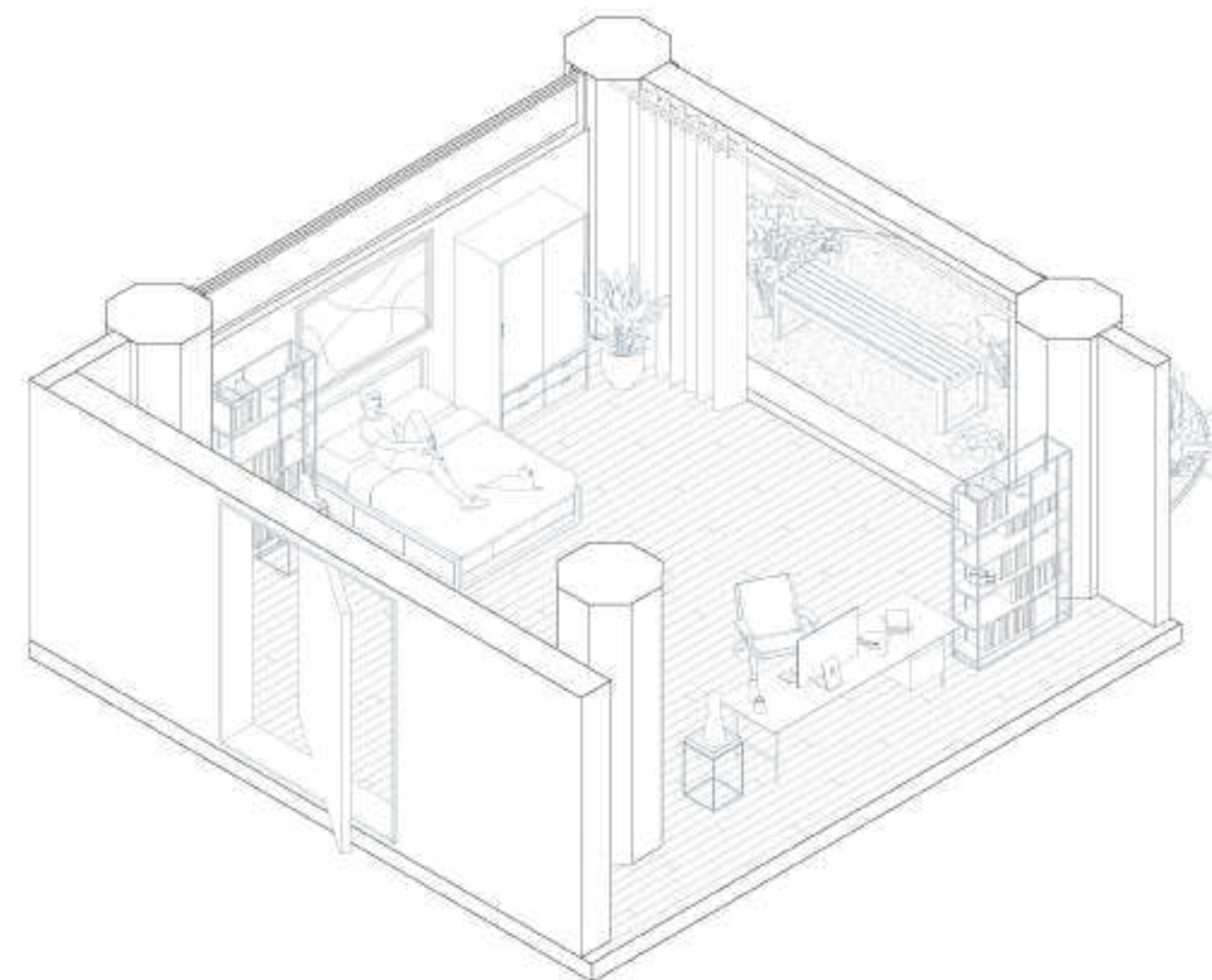
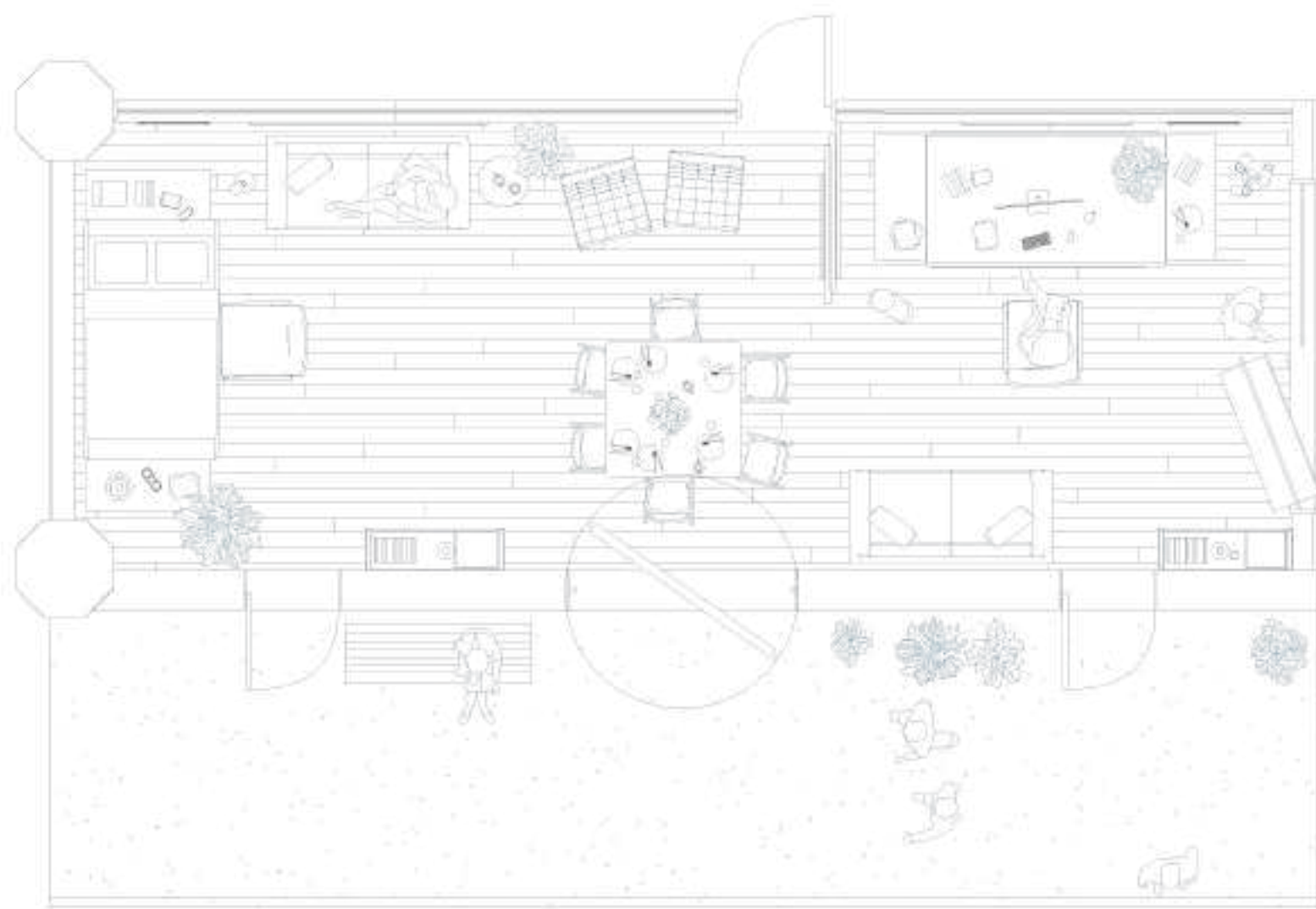
Social Condenser

74 Edinburgh Rd is a unique and complex project that seeks to imbue some notions of the constructivist and metabolist rhetorics. This is in order to address issues of counter gentrification, spatial privitisation and the accessibility of public utility. This project brief required an exhaustive attention to NCC requirement and in depth service design and engineering.

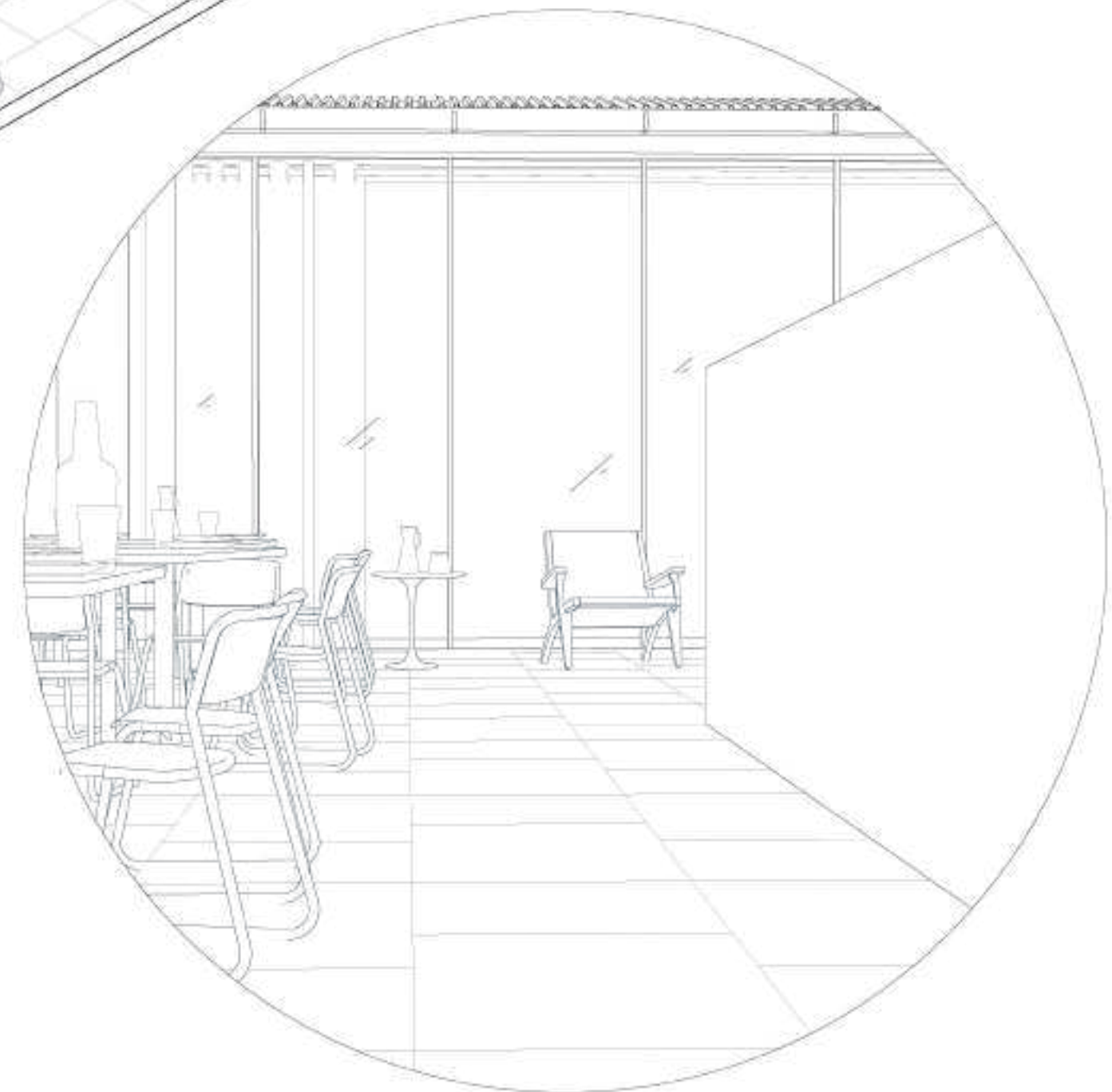
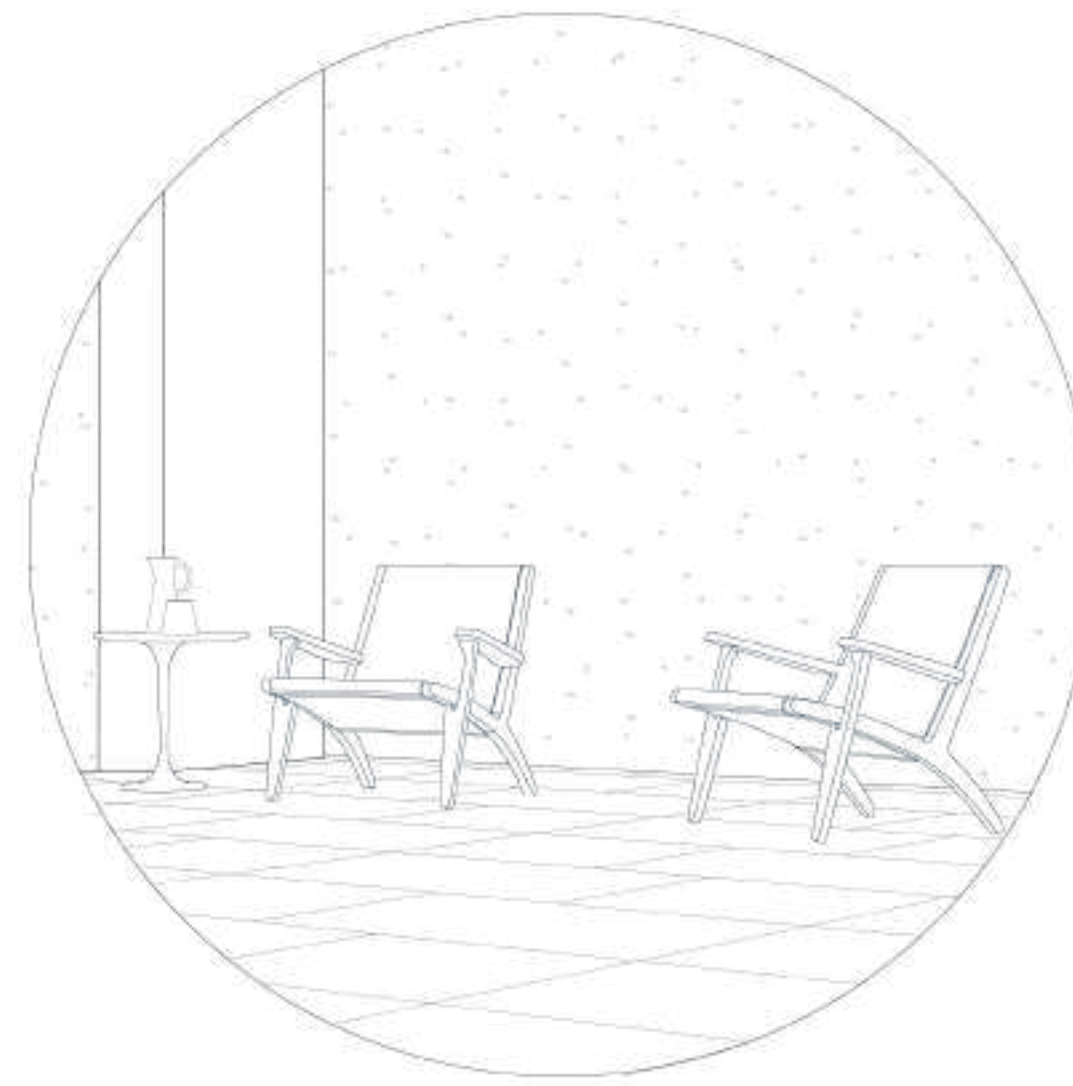
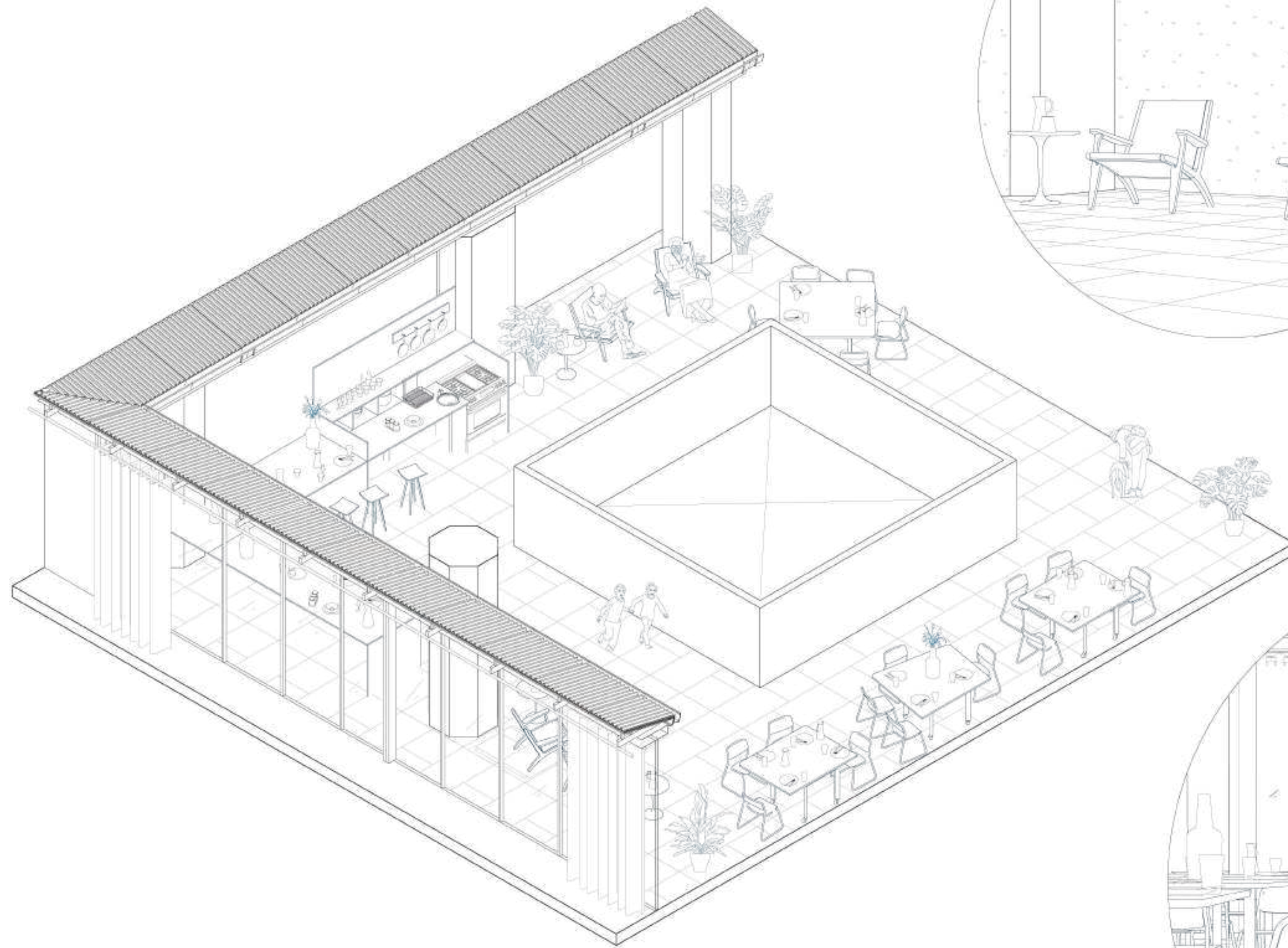
74 Edinburgh Rd
Marrickville

01. Student Housing



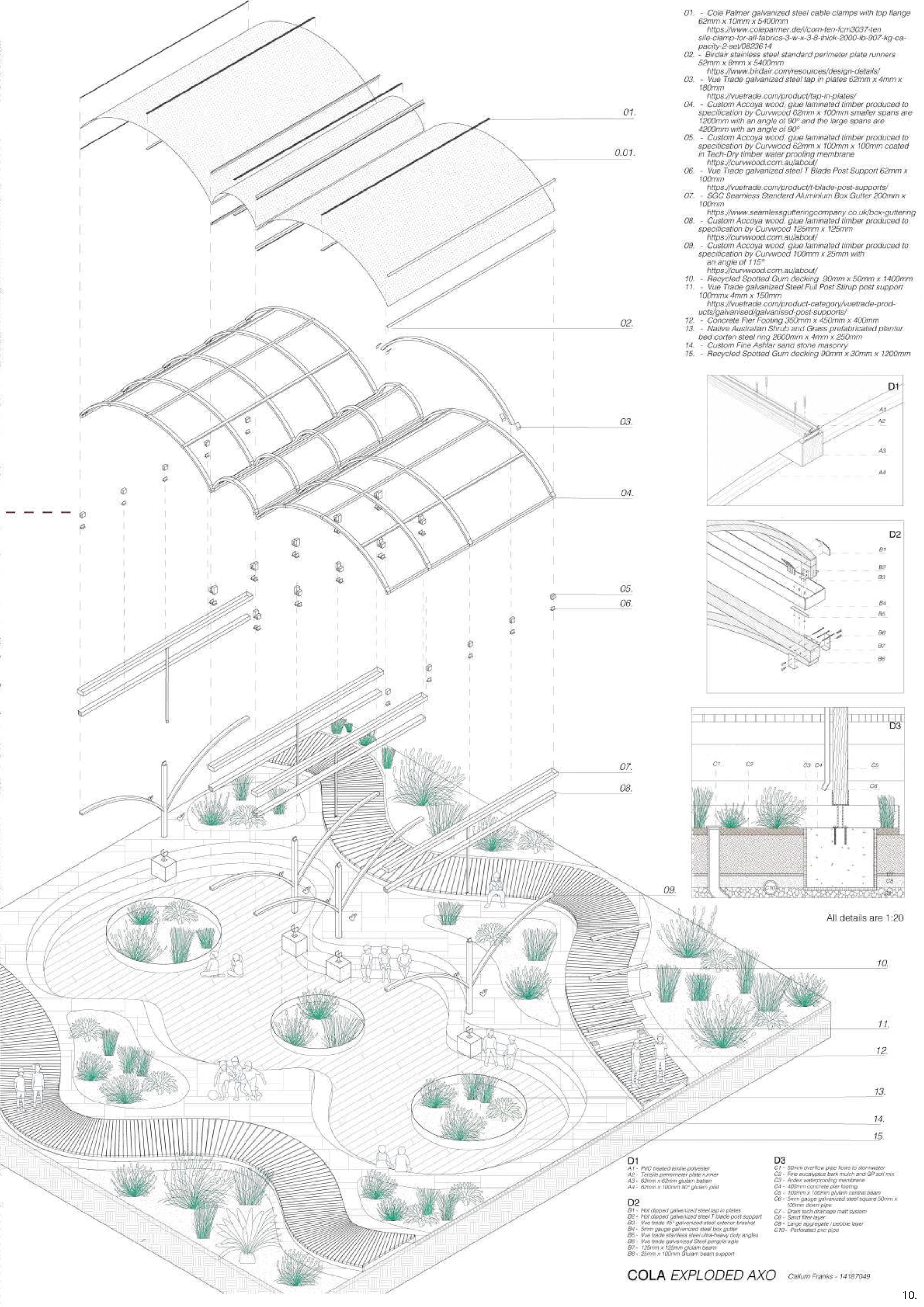
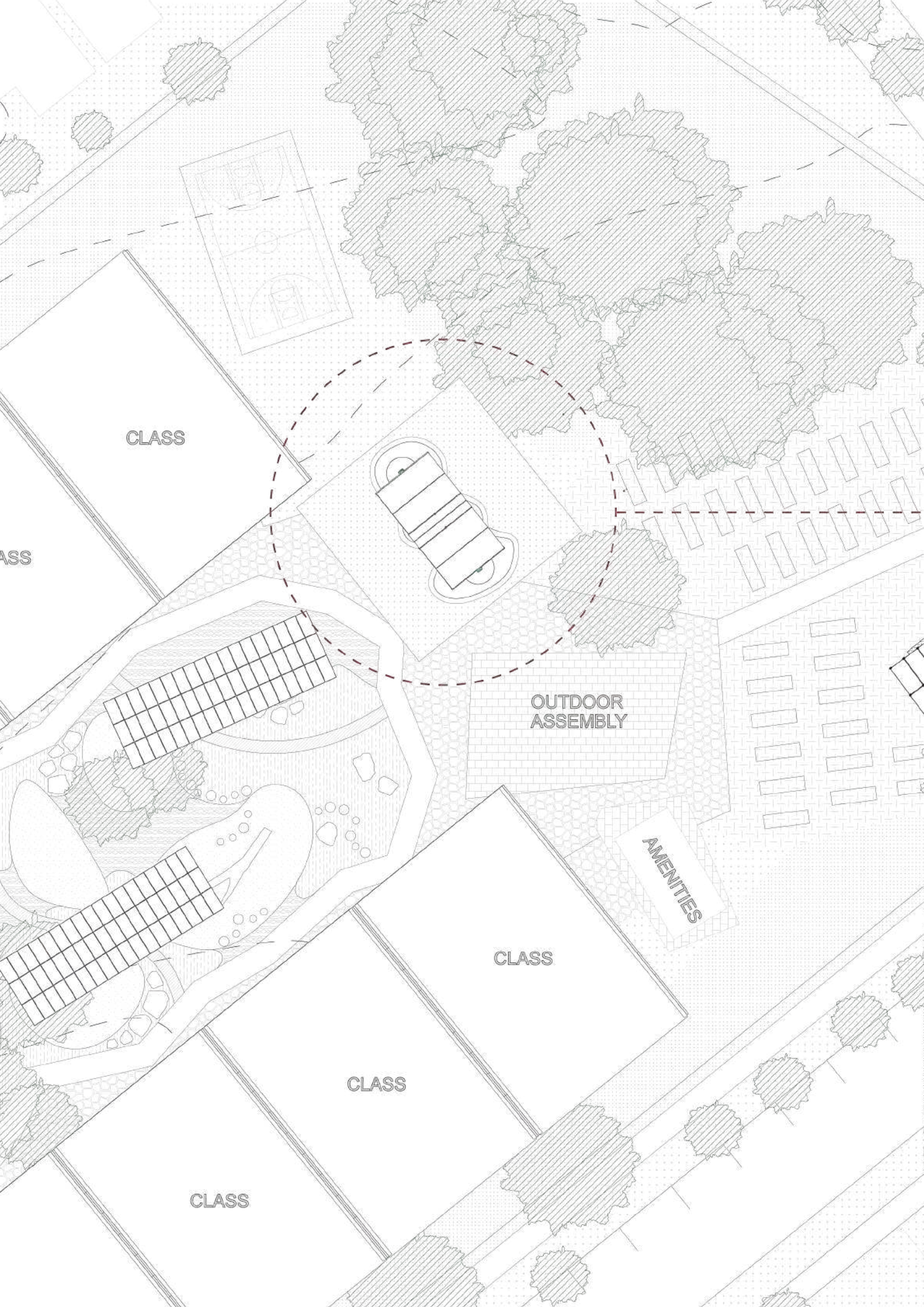




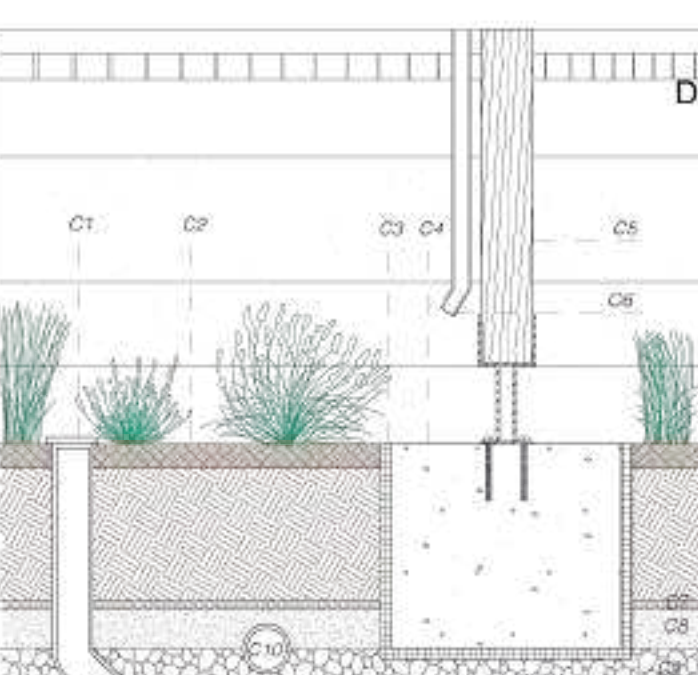
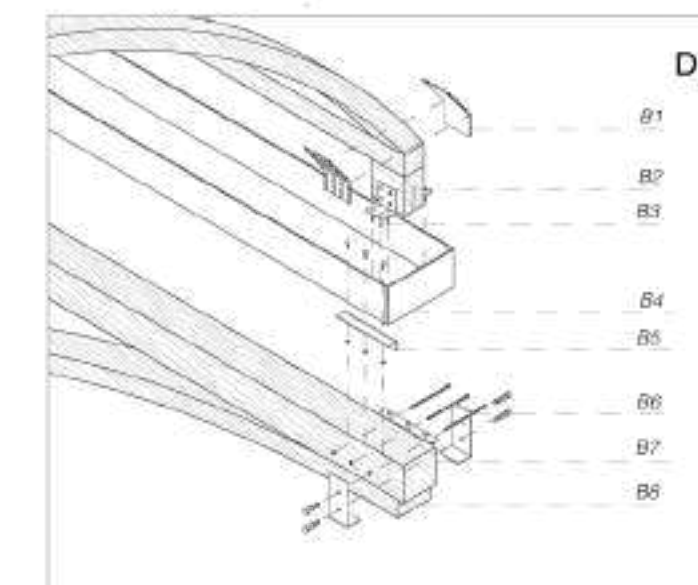
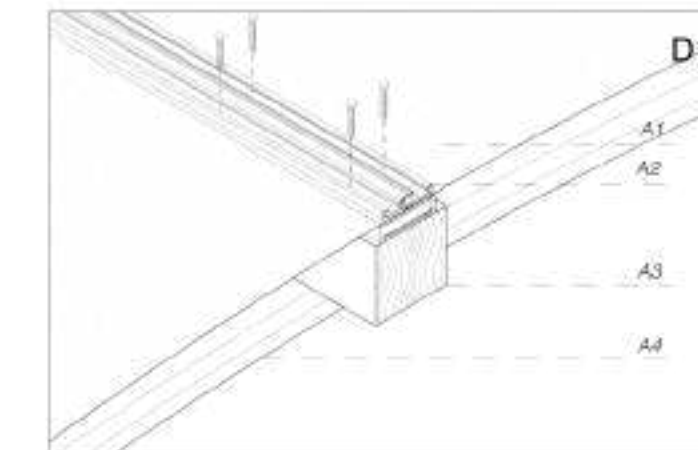


02.
Kyeemagh Public

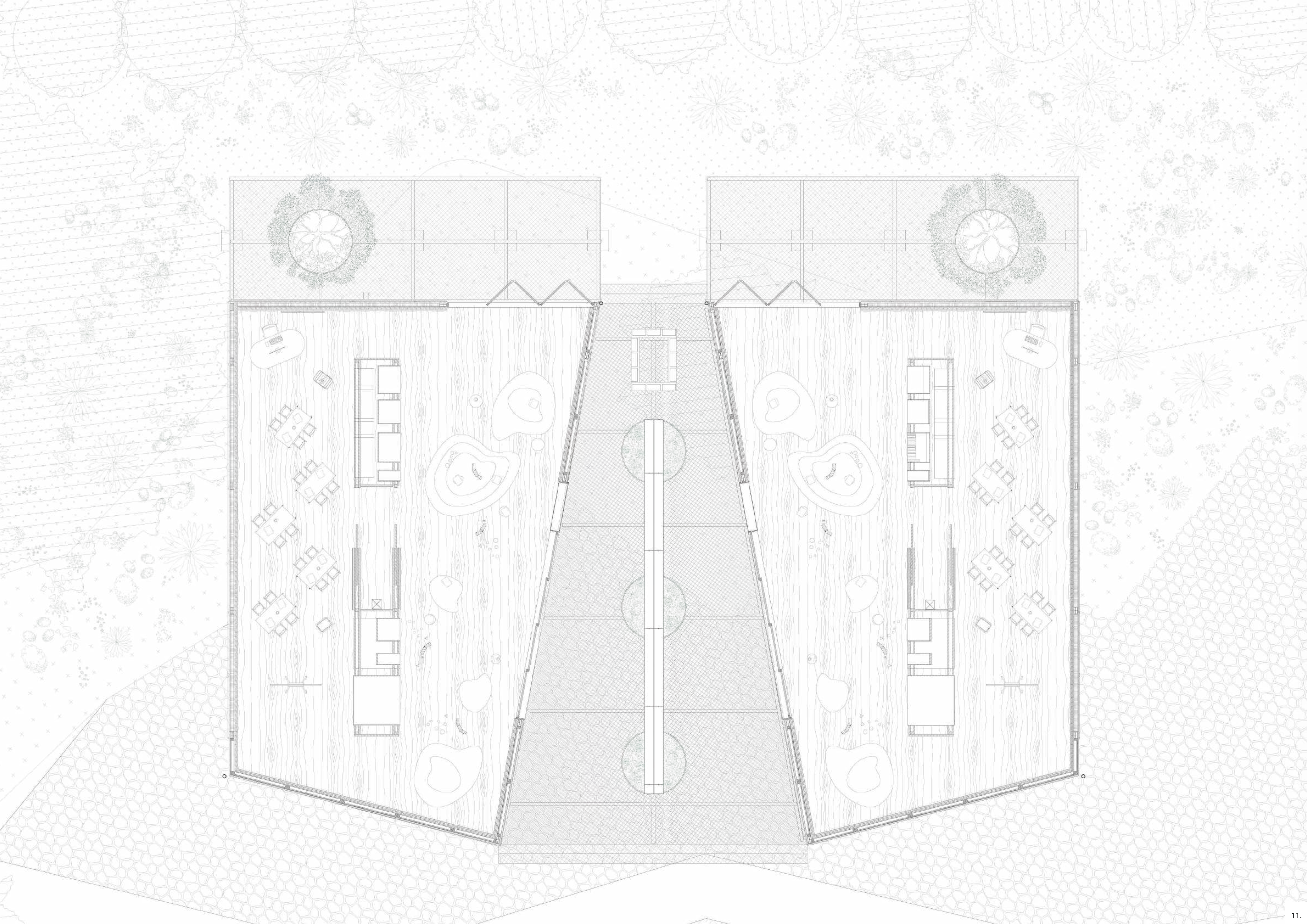


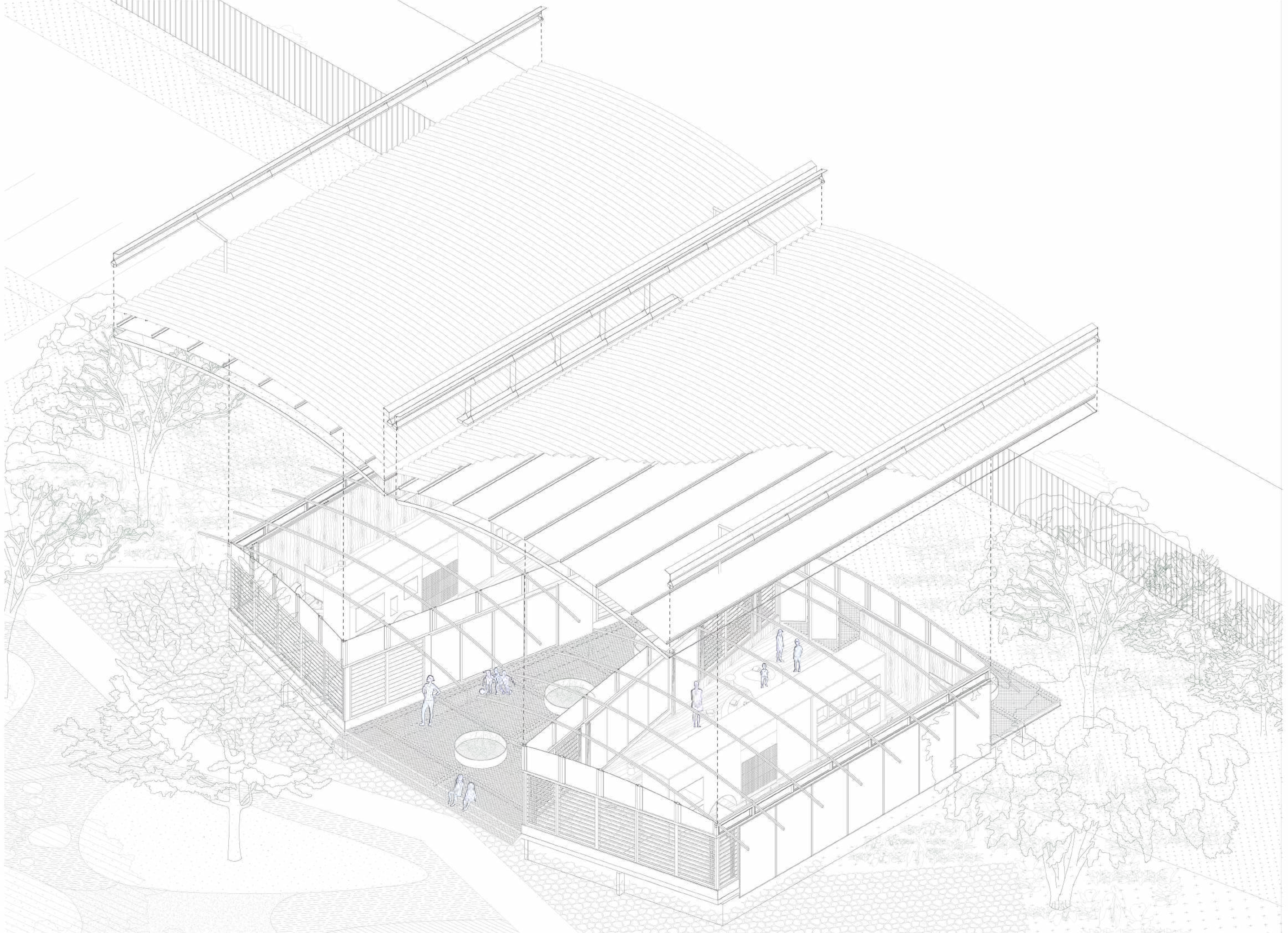


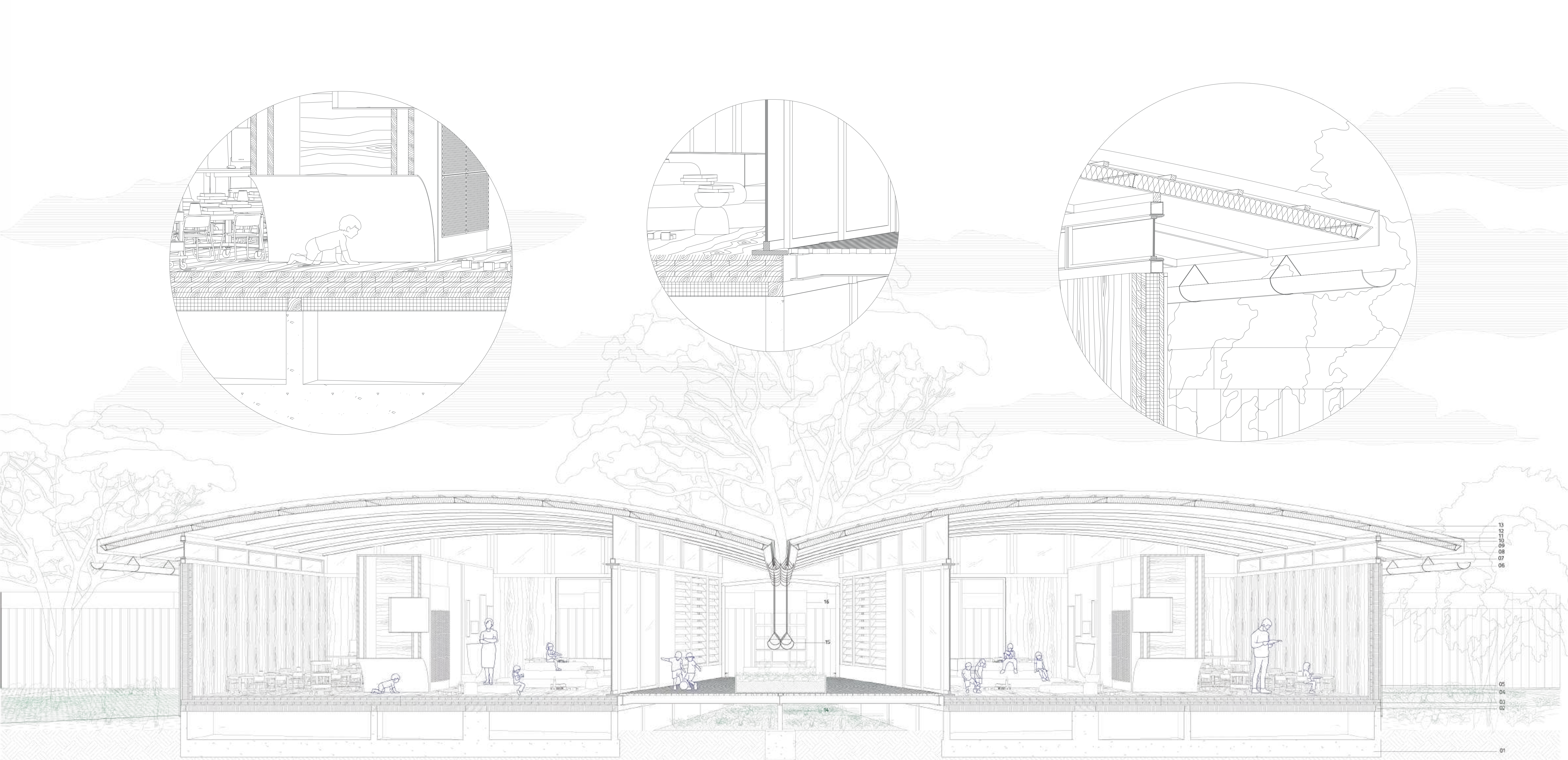
- 01. - Cole Palmer galvanized steel cable clamps with top flange 62mm x 10mm x 5400mm
<https://www.colepalmer.de/icom-ten-fom3337-ten>
sile-clamp-for-all-fabrics-3-w-x-3-8-thick-2000-lb-907-kg-capacity-2-set/0823614
- 02. - Birdair stainless steel standard perimeter plate runners 52mm x 8mm x 5400mm
<https://www.birdair.com/resources/design-details/>
- 03. - Vue Trade galvanized steel lap in plates 62mm x 4mm x 180mm
<https://vuetrade.com/product/tap-in-plates/>
- 04. - Custom Accoya wood, glue laminated timber produced to specification by Curwood 62mm x 100mm smaller spans are 1200mm with an angle of 90° and the large spans are 4200mm with an angle of 90°
<https://curwood.com.au/about/>
- 05. - Custom Accoya wood, glue laminated timber produced to specification by Curwood 62mm x 100mm x 100mm coated in Tech-Dry timber water proofing membrane
<https://curwood.com.au/about/>
- 06. - Vue Trade galvanized steel T Blade Post Support 62mm x 100mm
<https://vuetrade.com/product/t-blade-post-supports/>
- 07. - SGC Seamless Standard Aluminium Box Gutter 200mm x 100mm
<https://www.seamlessgutteringcompany.co.uk/box-guttering>
- 08. - Custom Accoya wood, glue laminated timber produced to specification by Curwood 125mm x 125mm
<https://curwood.com.au/about/>
- 09. - Custom Accoya wood, glue laminated timber produced to specification by Curwood 100mm x 25mm with an angle of 115°
<https://curwood.com.au/about/>
- 10. - Recycled Spotted Gum decking 90mm x 50mm x 1400mm
- 11. - Vue Trade galvanized Steel Full Post Stirup post support 100mmx 4mm x 150mm
<https://vuetrade.com/product-category/vuetrade-products/galvanised-post-supports/>
- 12. - Concrete Pier Footing 350mm x 450mm x 400mm
- 13. - Native Australian Shrub and Grass prefabricated planter bed corten steel ring 2000mm x 4mm x 250mm
- 14. - Custom Fine Ashlar sand stone masonry
- 15. - Recycled Spotted Gum decking 90mm x 30mm x 1200mm



- D1 - PVC treated textile polyester
A1 - Tensile perimeter plate runner
A2 - 62mm x 62mm glulam baler
A3 - 62mm x 100mm 90° glulam post
- D2 - Hot dipped galvanized steel T blade post support
B1 - Hot dipped galvanized steel T blade post support
B2 - Vue Trade 45° galvanized steel exterior bracket
B3 - 50mm gauge galvanized steel box gutter
B4 - Vue Trade stainless steel ultra-heavy duty angle
B5 - Vue Trade galvanized steel pergola angle
B6 - 125mm x 125mm glulam beam
B7 - 25mm x 100mm glulam beam support
- D3 - 20mm overflow pipe flows to stormwater
C1 - Fine eucalyptus bark mulch and GP soil mix
C2 - Arden waterproofing membrane
C3 - 400mm concrete pier footing
C4 - 100mm x 100mm glulam central beam
C5 - 50mm gauge galvanized steel square 50mm x 100mm down pipe
C6 - Drain such drainage matt system
C7 - Sand filter layer
C8 - Large aggregate / pebble layer
C9 - Perforated PVC pipe





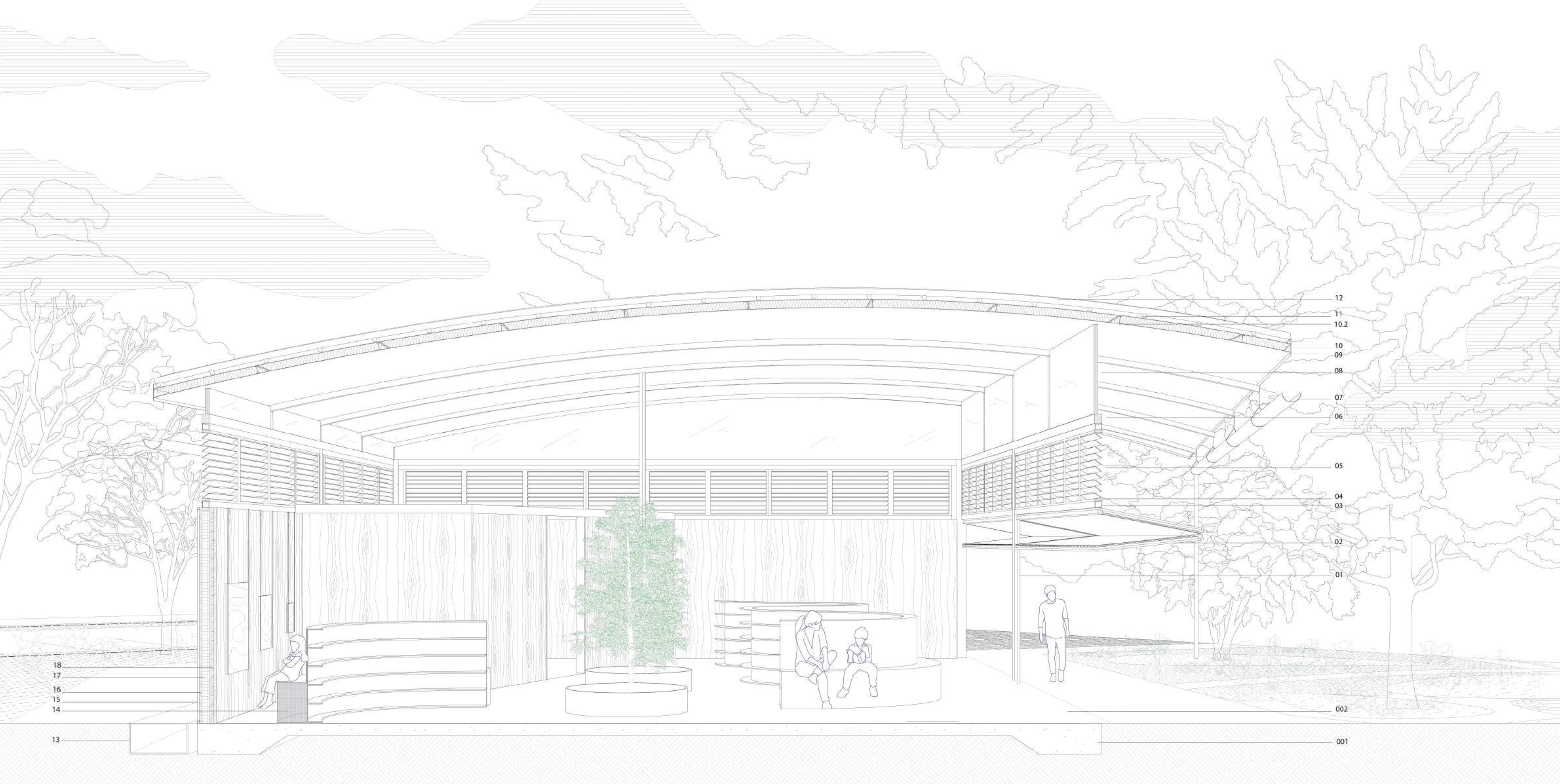


13
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05
04
03
02

01

- 01 - Japanese Doka Foundation: Poured 150mm x 150mm Concrete Slab
02 - 120mm x 120mm Weathered Finished Chestnut Bolted to Poured Concrete
03 - 3 Ply CLT 45mm x 140mm Pine Members
04 - 50mm Exterior Polycarbonate Cladding
05 - 40mm Treated Pine Cladding
06 - 300mm x 150mm Suspended Round Profile Gutter: This Suspended System is Based on the Hydroponic Hanging Gutters Utilised in Greenhouses
07 - 110mm x 110mm Square Hollow Section Steel Member
08 - Rein Water Guide Plate Allows for the Accurate Direction Of Rain Water Run-off From Roof into the Suspended Gutter and Acts as Fascia Board for Exterior Roof Profile
09 - 120mm x 60mm Cold Rolled Steel I Beam
10 - Steel Plate Window Frame
11 - 110mm x 110mm Curved Steel Hollow Section Beam
12 - 60mm x 80mm H3 Timber Batten
13 - Large Form Aramax Roofing Sheet
14 - Ezpier Pier Footing System, Suspending Structural Steel Gutter Floor
15 - 300mm x 150mm Suspended Round Profile Gutter: This Suspended System is Based on the Hydroponic Hanging Gutters Utilised in Greenhouses
16 - Initial Perforated Suspended Gutter Unit, Creating a Path for the Flow of Rainwater into the Second Interactive Gutter Unit



001 - Poured One Way Ribbed Concrete Sab

002 - Stamped Large Form Internal Paver

01 - Custom Column composed of 120mm x 60 mm Cold Rolled Steel I Beam With 45mm x 100mm Internal Timber Packers, Clad With 125mm x 60mm Steel C Channel

02 - Vertical Timber Bifold Door Clad with 50mm Polycarbonate Panel

03 - 110mm x 110mm Square Hollow Section Steel Member

04 - Steel Plate Window Frame

05 - Operable Glass Louvre Window System

06 - 150mm x 120mm Steel Cross Beam

07 - 300mm x 150mm Suspended Round Profile Gutter; This Suspended System is Based on the Hydroponic Hanging Gutters Utilised in Greenhouses

08 - 65mm Fixed Glazing Unit

09 - Rain Water Guide Plate Allows for the Accurate Direction Of Rain Water Run-off From Roof Into the Suspended Gutter and Acts as Fascia Board for Exterior Roof Profile

10 - Rockwool Batt Insulation

10.2 - 120mm x 60mm Cold Rolled Steel I Beam

11 - 60mm x 60mm H3 Timber Batten

12 - Large Form Aramax Roofing Sheet - "The ARAMAX® roof sheeting allows for huge roofing spans of up to 20 metres with no purlins or girts. This enables the designer to eliminate the cost and complexity of the buildings secondary structure". <https://australianmade.com.au/licensees/fielders/aramax-roofing>

13 - 950mm x 500mm Concealed Water Retention Unit

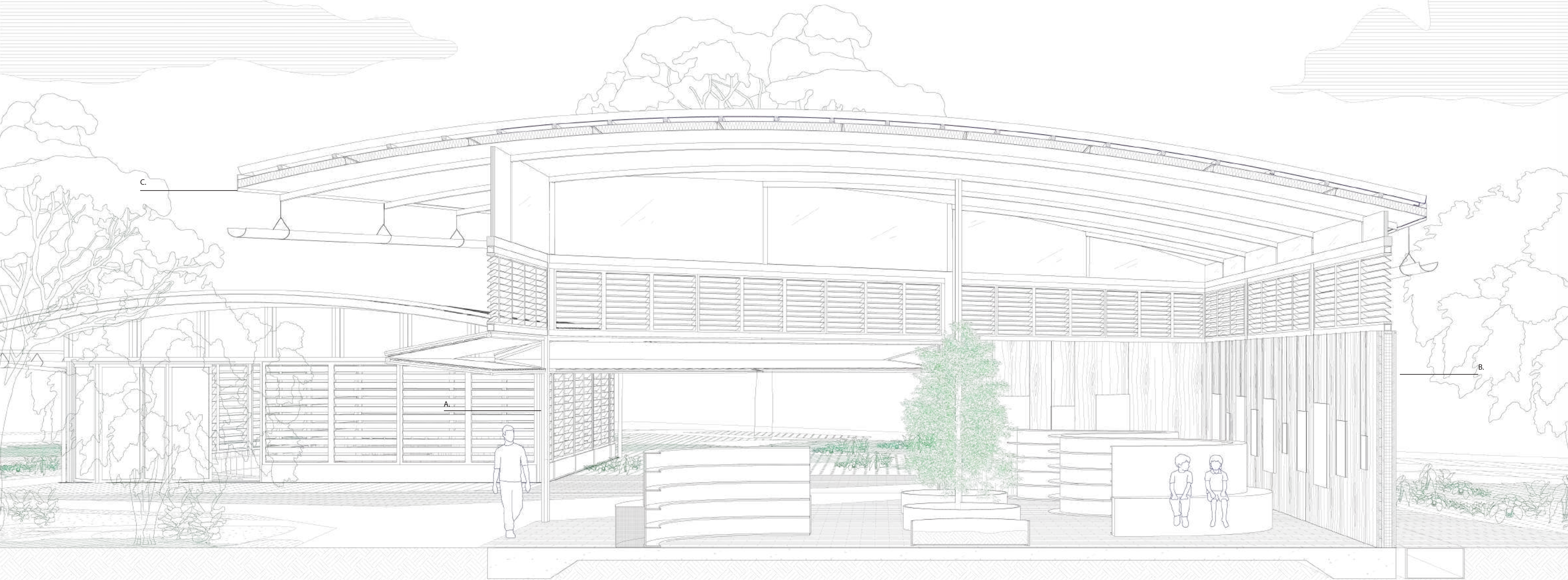
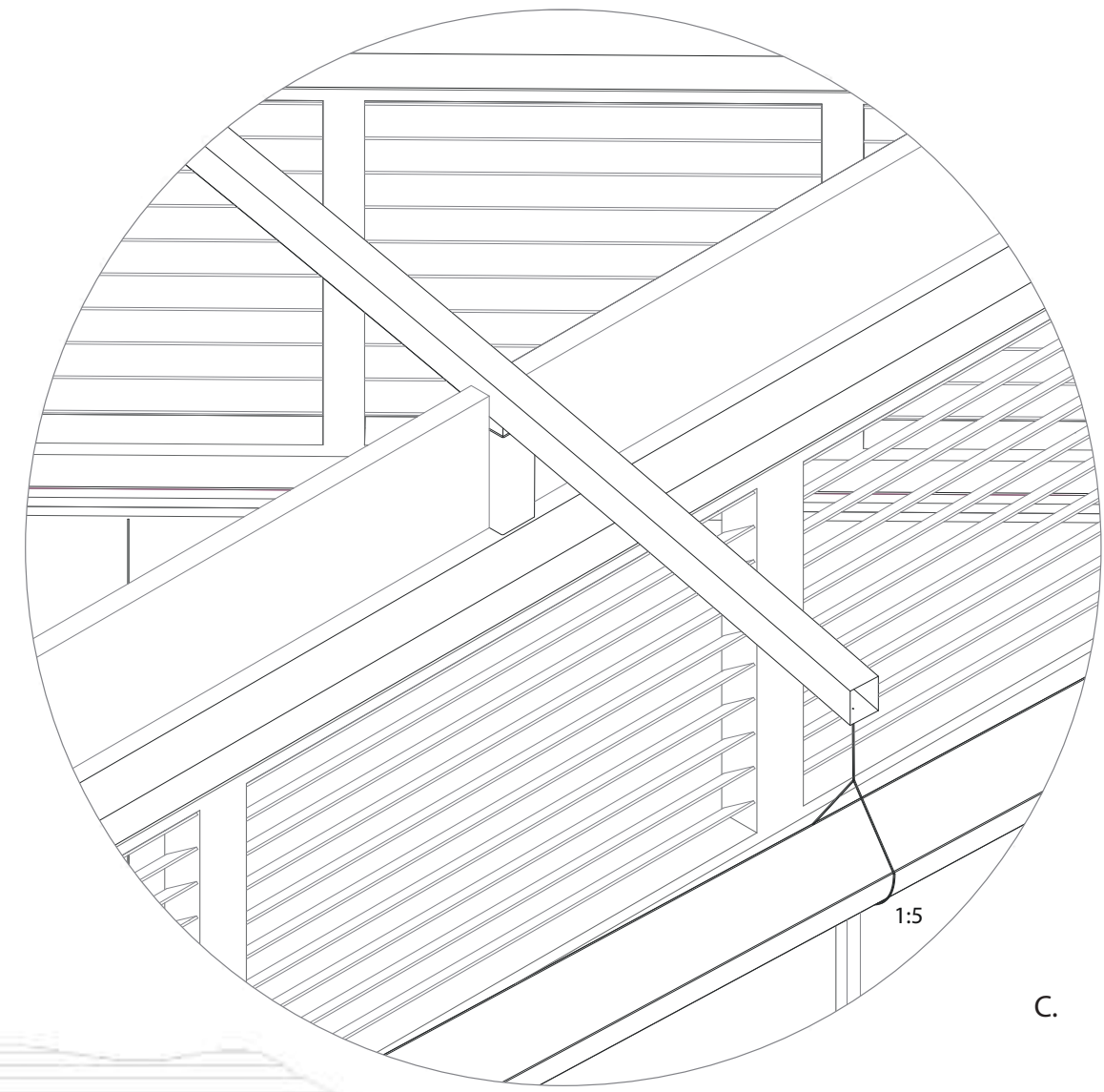
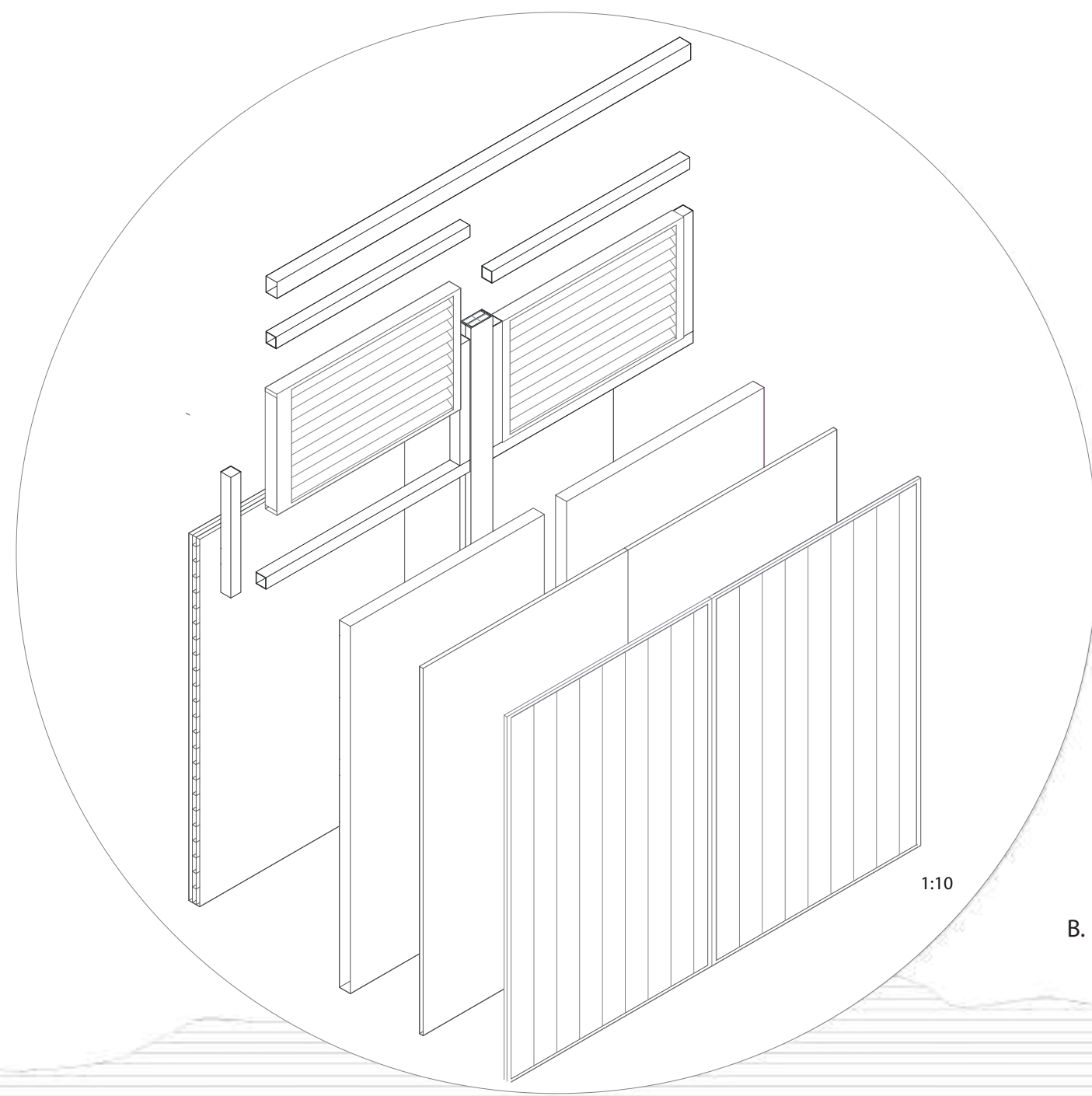
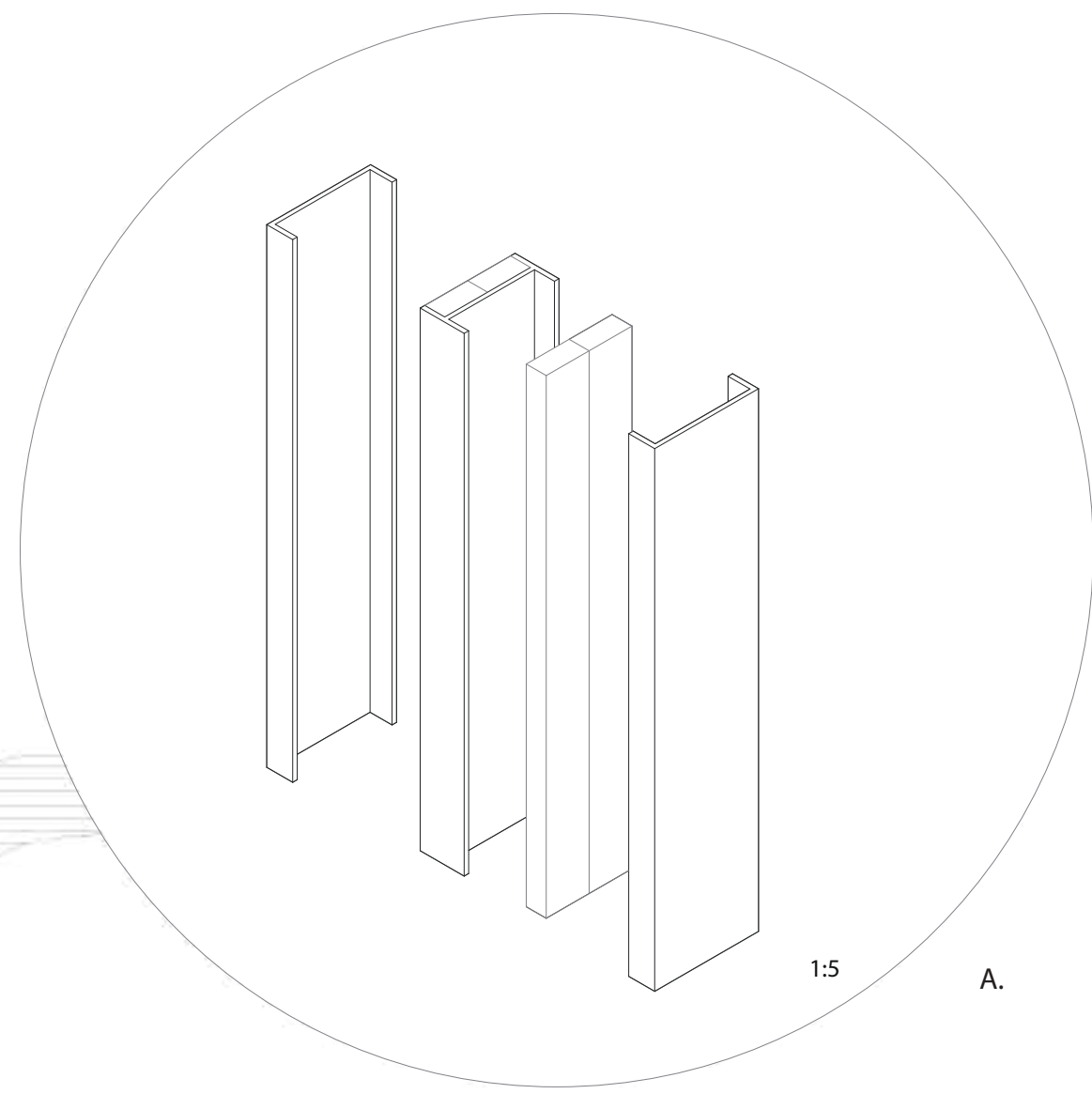
14 - Poured Bio Resin Display Unit

15 - 50mm Exterior Polycarbonate Cladding

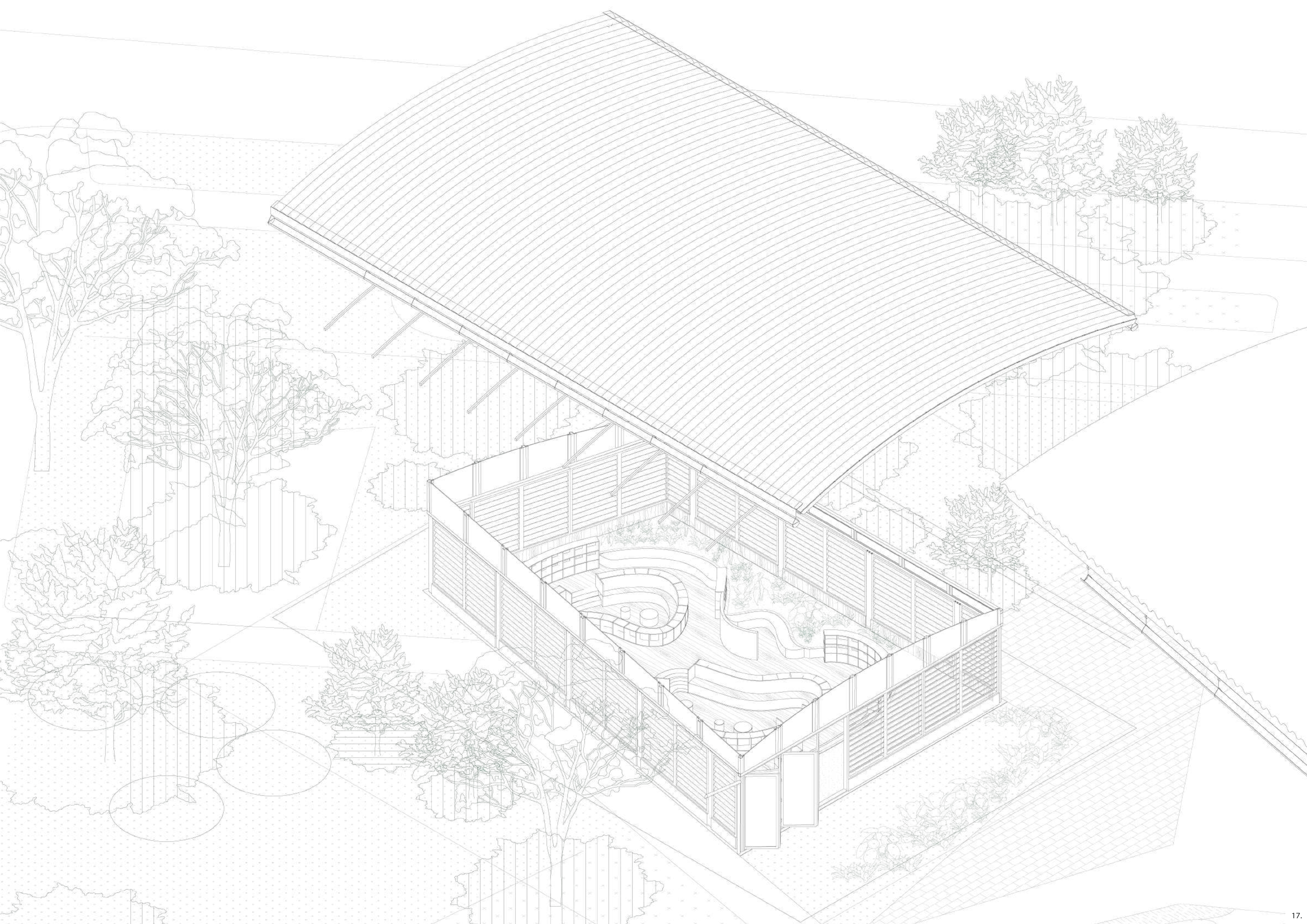
16 - 40mm Treated Pine Cladding

17 - 90mm Rigid Insulation Unit

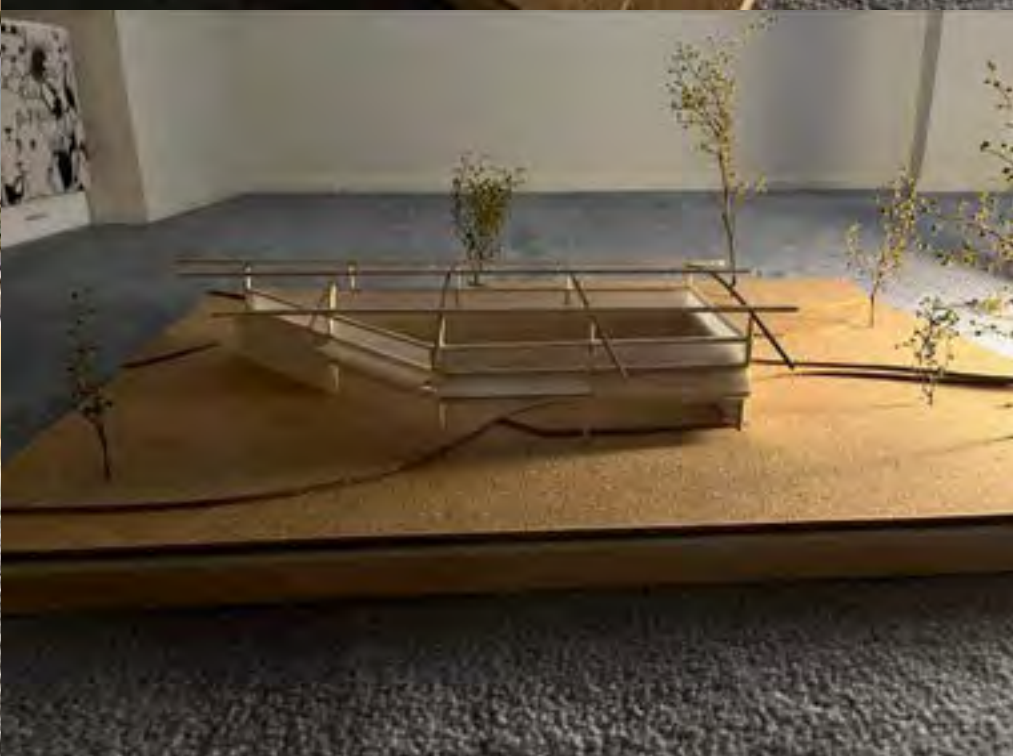
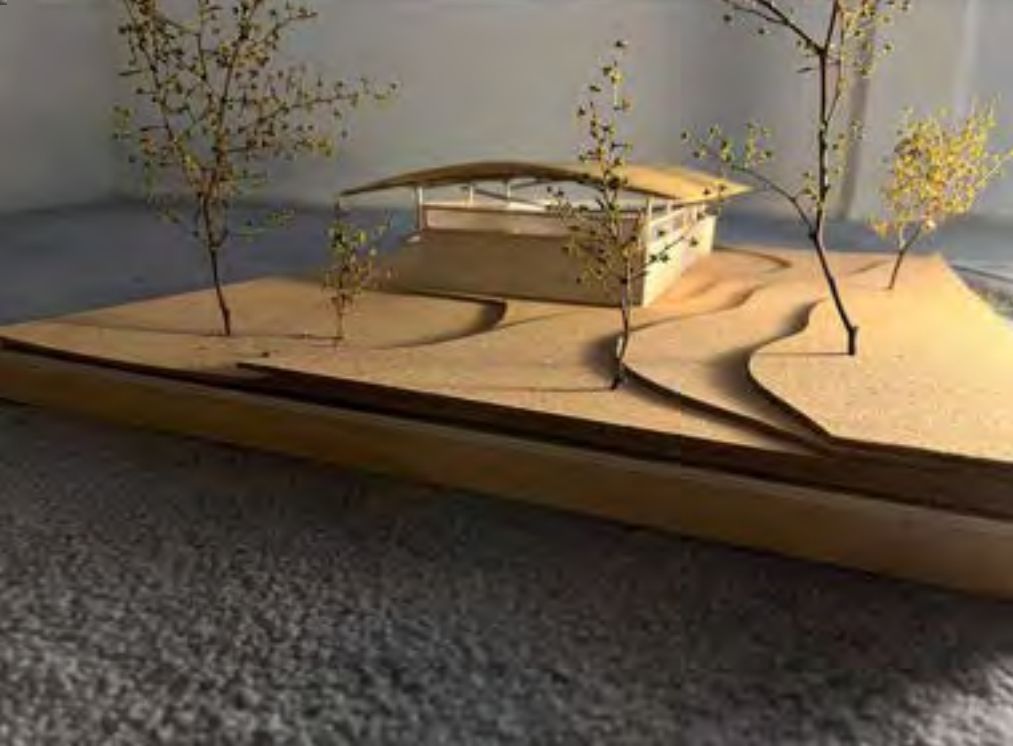
18 - 3 Ply CLT 45mm x 140mm Pine Members



A. -
B. -
C. -

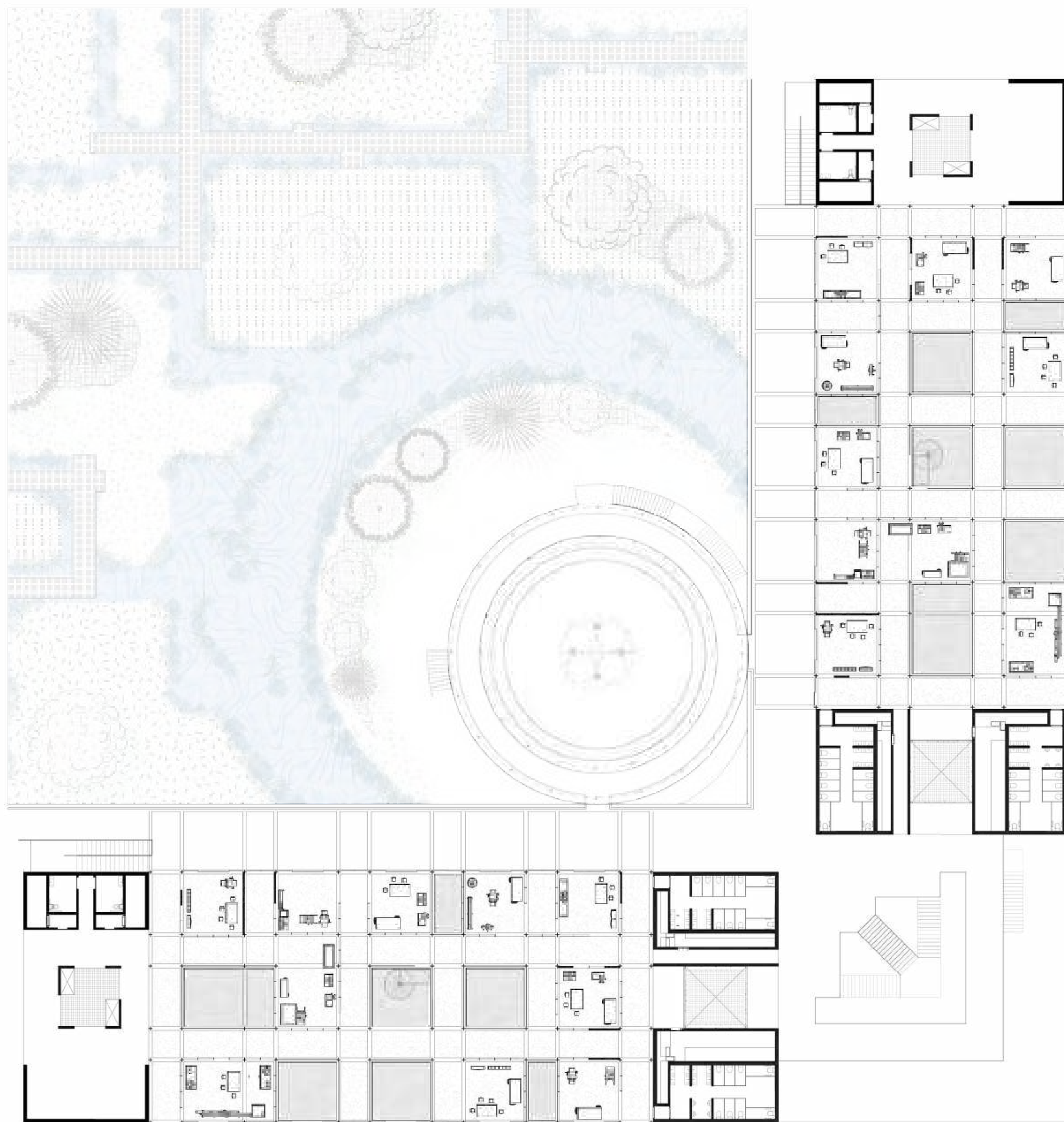




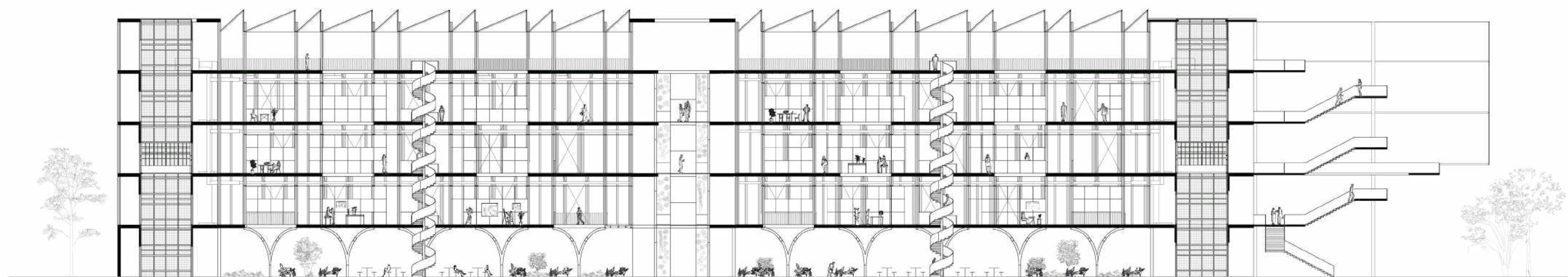


03. Social Condenser

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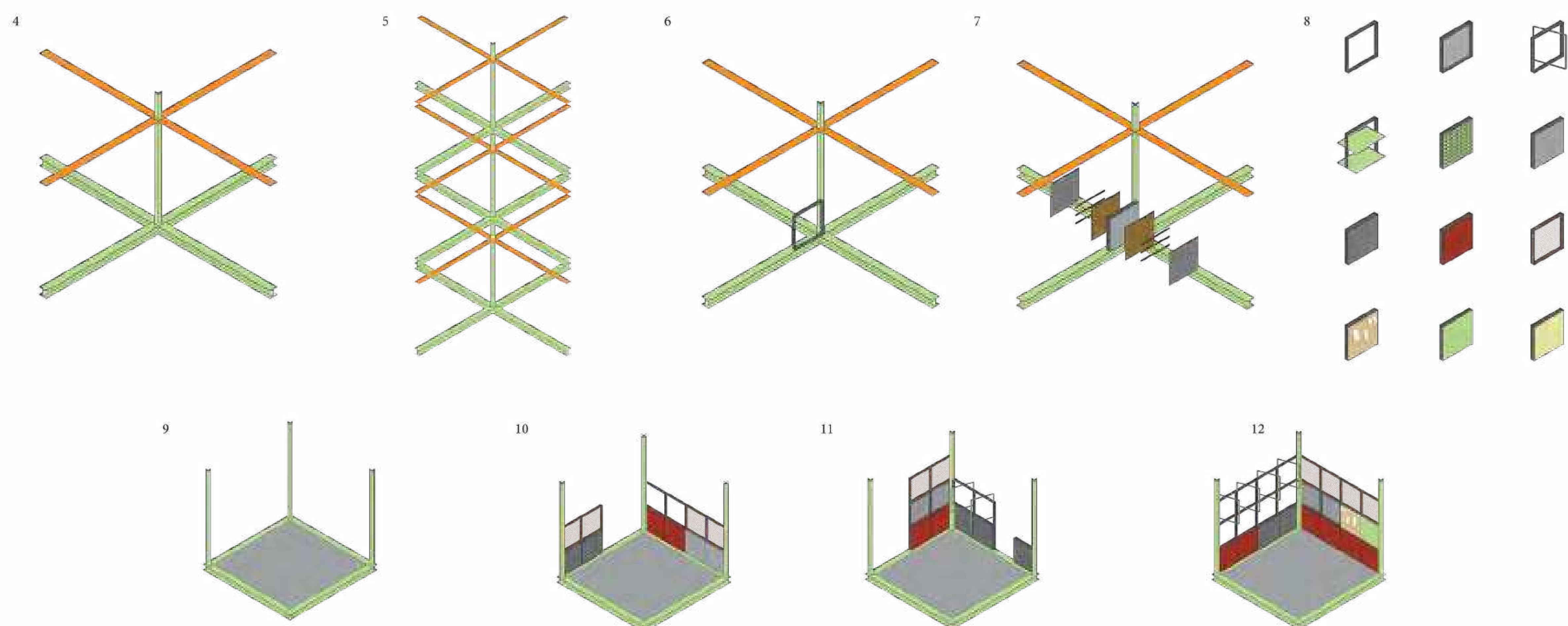
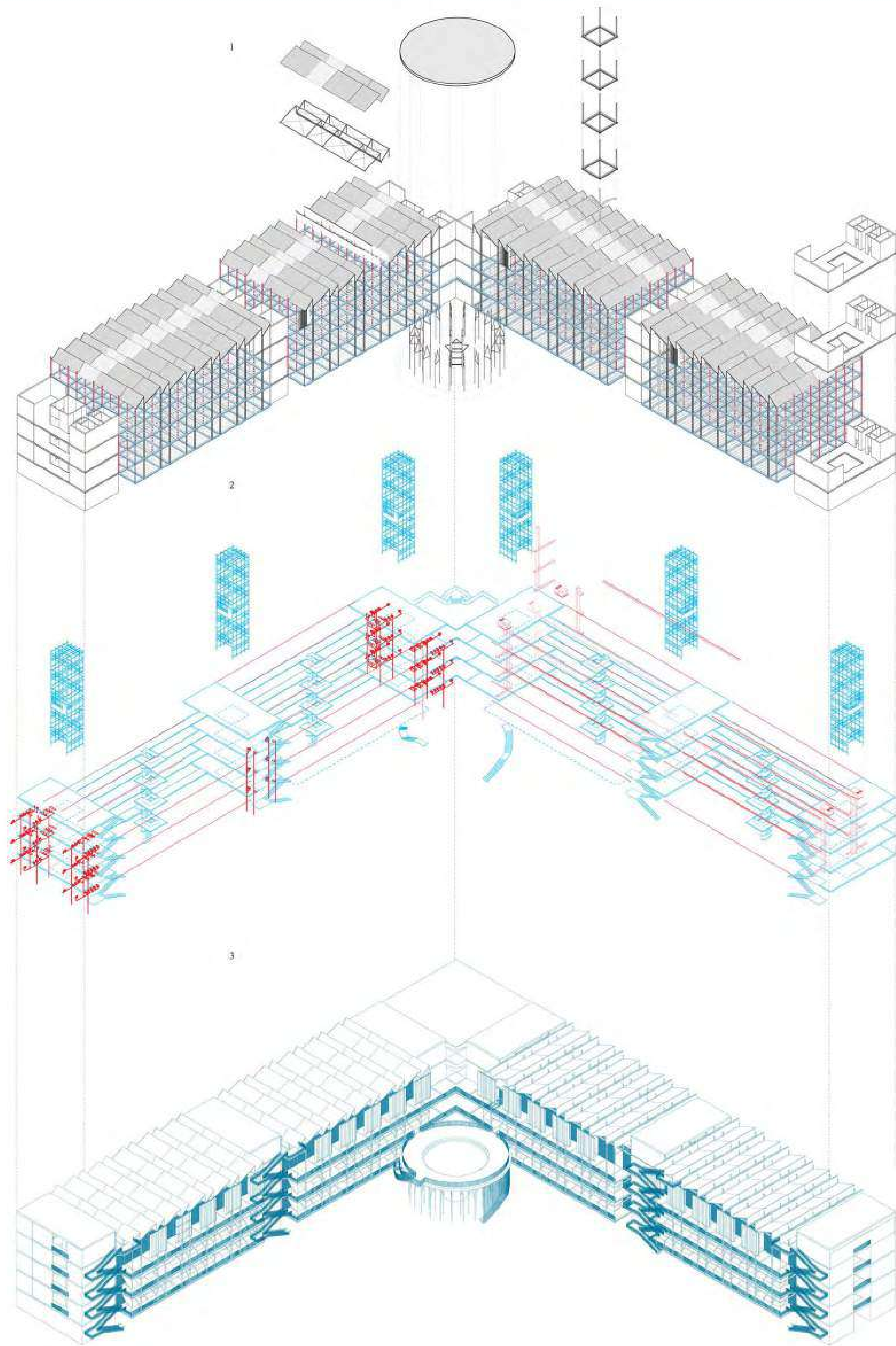


2



2





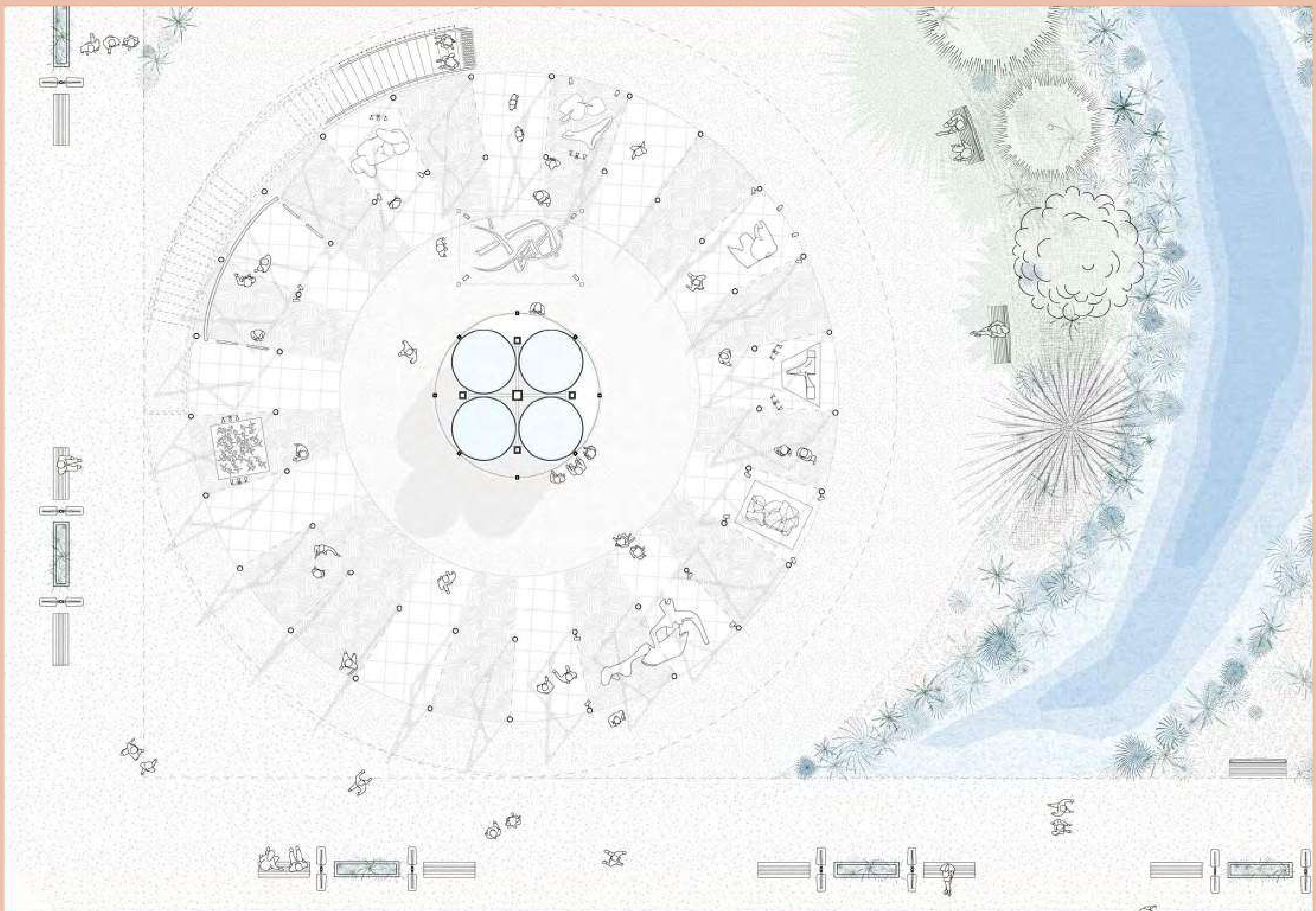




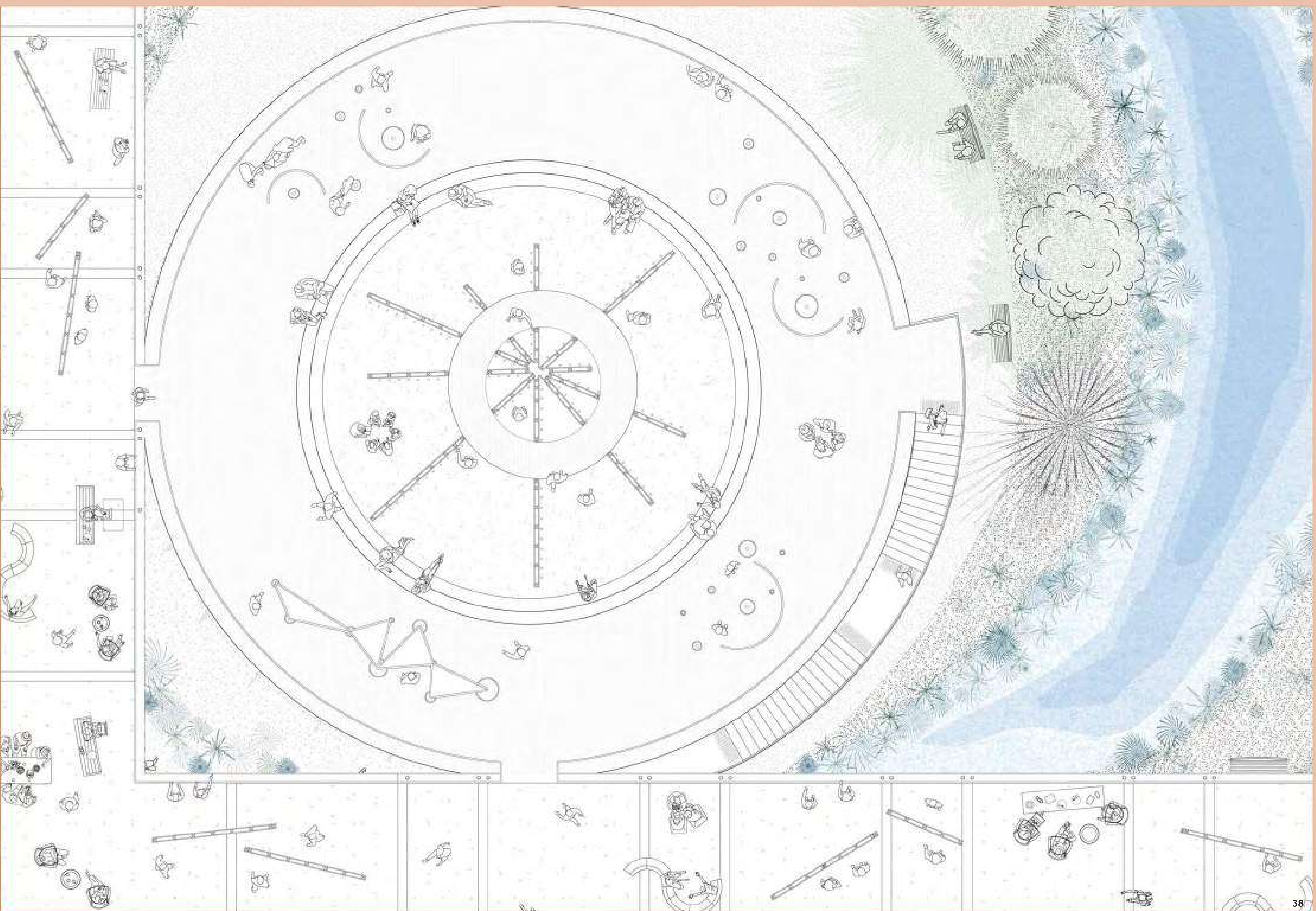








Architectural Site Plan of a Circular Park



Architectural Site Plan of a Circular Park